IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of synchronizing the phase of a local image frame synchronization signal generator of a local video data processor in communication with an asynchronous switched packet network to the phase of a reference image frame synchronization signal generator of a reference video data processor also coupled to said network, said local and reference processors having respective clocks, said reference and local image frame synchronization signal generators generating periodic image frame synchronization signals in synchronism with said reference and local clocks respectively, said method comprising the steps of:

frequency synchronizing said local and reference clocks;

said reference video data processor sending, via said network, to said local data processor one image timing packet providing reference image frame synchronization data indicating a difference in timing, measured with respect to said reference processor's clock, between a time at which said image timing packet is launched onto said network and a time of production of a reference image frame synchronization signal; [[and]]

said local video data processor controlling the phase of production of said local image frame synchronization signals in dependence on said reference image frame synchronization data and a time of arrival of said one image timing packet; and

sending to said local video data processor from said reference video data processor, via said network, data packets containing said video data, said image timing packet being sent independently of said data packets.

Claim 2 (Currently Amended): A method according to claim 1, in which said controlling includes adjusting said time of production of said local image frame

synchronization signal by a correction amount derived from a difference between said reference image frame synchronization data and a time, measured with respect to said local processor's clock and said local image frame synchronization signal, of arrival of said timing packet.

Claim 3 (Currently Amended): A method according to claim 2, further comprising:

sending to said local processor a plurality of said timing packets from said reference processor; and

controlling, by said local processor, said timing of said production of said local image frame synchronization signal in dependence on a function of said differences between:

reference image frame synchronization data in said timing packets; and

respective times of arrival of said timing packets at said local processor.

Claim 4 (Original): A method according to claim 3, in which said function is an average of said differences.

Claim 5 (Currently Amended): A method according to claim 1, further comprising:

adding a delay to said local image frame synchronization signal.

Claim 6 (Original): A method according to claim 5, in which said delay is a predetermined delay.

Claim 7 (Currently Amended): A method according to claim 1, ~~further comprising:~~

~~sending to said local data processor from said reference processor, via said network, data packets containing said video data, said image timing packets being sent independently of said data packets,~~

wherein said reference data processor includes a source of video data produced synchronously with said reference processor's clock.

Claim 8 (Currently Amended): A method according to claim 1, further comprising:

sending to said local data processor from said reference processor, via said network, image timing packets containing said video data and also providing said reference image frame synchronization data,

wherein said reference data processor includes a source of video data produced synchronously with said reference processor's clock.

Claim 9 (Previously Presented): A method according to claim 1, further comprising:

sensing, by said reference processor, when said network has capacity to carry an image timing packet; and

sending, from said reference processor, an image timing packet when such network capacity exists.

Claim 10 (Previously Presented): A method according to claim 1, in which said frequency synchronizing said local and reference clocks includes the steps of:

sending to said local data processor from said reference processor, via said network, clock timing packets each providing a destination address of said local processor and reference clock data indicating a time at which said clock timing packet is sent; and

controlling, by said local processor, said frequency of said local processor's clock in dependence on said reference clock data and times of arrival of said clock timing packets.

Claim 11 (Previously Presented): A method according to claim 10, further comprising:

counting cycles of said reference processor's clock by said reference processor; and

setting, by said reference processor, said reference clock data as said count of cycles of said reference processor's clock in dependence on a time at which said clock timing packet containing said reference clock data is launched onto said network.

Claim 12 (Previously Presented): A method according to claim 11, further comprising:

counting cycles of said local processor's clock by said local processor;

generating, by said local processor, local clock data as a count of cycles of said local processor's clock at a time of receipt of a clock timing packet containing reference clock data; and

controlling, by said local processor, said local processor's clock in dependence on an error signal dependent on a difference between said reference clock data in successively received timing packets and a difference between local clock data indicating said local clock time at said times of receipt of said timing packets.

Claim 13 (Previously Presented): A method according to claim 12, further comprising:

low pass filtering said error signal to generate a low-pass filtered error signal.

Claim 14 (Previously Presented): A method according to claim 13, further comprising:

receiving said low-pass filtered error signal in said local processor; and

controlling, by said local processor, said local processor's clock in dependence on said received error signal.

Claim 15 (Currently Amended): A method according to claim 10, in which said clock timing packet containing said reference image frame synchronization data is independent of said reference clock data.

Claim 16 (Currently Amended): A method according to claim 10, in which said timing packet containing said reference image frame synchronization data also contains said reference clock data.

Claim 17 (Currently Amended): A method according to claim 1, further comprising:

aligning, in said local processor, an image of a video signal with said local image frame synchronization signal.

Claim 18 (Currently Amended): A method according to claim 1, in which said image frame synchronization signal is a field or frame synchronization signal.

Claim 19 (Currently Amended): A method according to claim 1, in which said reference image frame synchronization data indicates a difference in timing, measured with respect to said reference processor's clock, between a time at which said image timing packet

is launched onto said network and a time of production of an immediately preceding reference image frame synchronization signal.

Claim 20 (Currently Amended): A method according to claim 1, in which timing packets carrying information relating to at least two image frame synchronization signals are launched onto said network.

Claim 21 (Previously Presented): A computer readable storage medium encoded with program code which when executed by a computer cause a processor to carry out the method according to claim 1.

Claims 22-24 (Canceled).

Claim 25 (Currently Amended): A video network, comprising:

a reference video data processor including a reference image frame synchronization signal generator and a reference clock generator, said reference synchronization signal generator configured to generate periodic image frame synchronization signals in synchronism with said reference clock;

a local video data processor including a local image frame synchronization signal generator and a local clock generator frequency-locked to said reference clock generator, said local synchronization signal generator configured to generate periodic image frame synchronization signals in synchronism with said local clock;

an asynchronous packet-based network linking said local processor and said reference processor;

said reference video data processor includes a sending unit configured to send, via said network, to said local data processor one image timing packet providing reference image frame synchronization data indicating a difference in timing, measured with respect to said reference processor's clock, between a time at which said image timing packet is launched onto said network and a time of production of a reference image frame synchronization signal; [[and]]

said local processor including a controlling unit configured to adjust the phase of production of said local image frame synchronization signal in dependence on said reference image frame synchronization data and said time of arrival of said one timing packet; and

said reference video data processor sending to said local video data processor, via said network, data packets containing said video data, said image timing packet being sent independently of said data packets.

Claim 26 (Currently Amended): A local video data processor including a local image frame synchronization signal generator and a local clock generator frequency-lockable to a reference clock generator at a reference video data processor and configured to connect to said local video data processor via an asynchronous packet-based network, said local synchronization signal generator configured to generate periodic image frame synchronization signals in synchronism with said local clock, said local video data processor comprising:

a controlling unit configured to adjust the phase of production of said local image frame synchronization signal in dependence on one received image timing packet providing reference image frame synchronization data received indicating a difference in timing, measured with respect to a clock of said reference processor, between a time at which the image timing packet is launched onto said network and a time of production of a reference

image frame synchronization signal, provided by the image timing packet from said reference clock generator and a time of arrival of the one image timing packet,

wherein said reference video data processor sending to said local video data processor, via said network, data packets containing said video data, said image timing packet being sent independently of said data packets.

Claim 27 (Currently Amended): A reference video data processor, comprising:

a reference image frame synchronization signal generator and a reference clock generator;

said reference synchronization signal generator configured to generate periodic image frame synchronization signals in synchronism with said reference clock;

said reference processor configured to connect via an asynchronous packet-based network to a local video data processor having a local image frame synchronization signal generator and a local clock generator frequency-lockable to said reference clock generator, said local frame synchronization signal generator configured to generate periodic image frame synchronization signals in synchronism with said local clock; [[and]]

said reference video data processor including a phase synchronization unit configured to synchronize a phase of the local image frame synchronization signal generator and a phase of the reference synchronization generator by sending, via said network, to said local data processor one image timing packet providing reference image frame synchronization data indicating a difference in timing, measured with respect to said reference processor's clock, between a time at which said one image timing packet is launched onto said network and a time of production of a reference image frame synchronization signal; and

said reference video data processor sending to said local video data processor, via said network, data packets containing said video data, said image timing packet being sent independently of said data packets.

Claim 28 (Previously Presented): An asynchronous switched network comprising a plurality of nodes, at least one of which nodes is coupled to a data processor that carries out the method of claim 1.

Claim 29 (Canceled).